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REMARKS

Claims 1-4, as amended, remain herein.

Claims 1 and 3 have been amended for clarity to recite controlling a spindle motor by constant angular velocity (CAV) control during a start-up period from start of spin-up processing to a read standby state. See applicants' specification, page 3, lines 23-25, describing processing before a read standby state is achieved.

This Amendment places all claims 1-4 in condition for allowance, and surely in better condition for any appeal. Thus, entry of this Amendment and allowance of all claims 1-4 are respectfully requested.

1. Claims 1 and 2 were rejected under 35 U.S.C. §102(b) over Okano U.S. Patent 5,161,142, and claims 3 and 4 were rejected under 35 U.S.C. §103(a) over Okano '142.

The presently claimed reproducing device comprises CAV means for controlling a spindle motor during a start-up period from start of spin-up processing of the disk-shaped recording

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medium to a read standby state. This arrangement and corresponding method are nowhere disclosed or suggested in the cited reference for the following reasons.

The Office Action cites Okano '142 as allegedly disclosing constant angular velocity (CAV) means for controlling a spindle motor during a start-up period from start of spin-up to a read standby state. The Office Action cites Okano '142, column 2, lines 21-26, which describes:

In the disk playing apparatus for playing CLV disks according to the present invention, the control of the rotational speed is performed so that the disk is rotated at a desired angular velocity independently of the radial position of the information reading point of reading means.

Okano '142 does not mention anything about controlling a spindle motor during a start-up period from start of spin-up processing of such a disk-shaped recording medium to a read standby state, but instead, describes "playing" CLV disks, meaning a typical read operation understood by a person skilled in the art to occur during normal steady-state disk operation and not during start-up, or run-up of disk speed to attain such steady-state operation.

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The Office Action also cites Okano '142, column 5, lines 26-65, which describes an output signal of rotational speed detector 10 supplied to the CAV servo circuit, for driving the spindle at a constant angular speed. Actually, Okano '142 describes more than mere use of a CAV servo circuit, as follows:

Okano '142, column 4, lines 50-61, describes reading a CLV-recorded disk with a CAV control, wherein the read signal is corrected by a correction signal generated by generating circuit 19 that receives an output signal r from position detector 11 (supplying the radial position of the slider) and an output signal ω from rotational speed detector 10 (supplying the rotational speed of the spindle). Circuit 19 calculates a correction c based on signals r and ω . Okano '142, column 6, lines 2-4, describes correction circuit 6 utilizing correction signal c to output a frequency that varies according to the radial position of the read head, for compensation of the RF signal read from the recorded disk, all occurring while the CAV control maintains the spindle at a constant speed.

Thus, Okano '142 does not disclose mere use of CAV control to read a CLV disk, but instead discloses generating a

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correction signal to be combined with the RF signal read from the disk while simultaneously controlling the disk at constant speed with the CAV control means. Thus, the whole point of the Okano '142 system is to correct the RF signal read from the constant-speed disk, i.e., the read head must first travel to a read-address and read data, namely the RF signal, from that address. Mere operation of the CLV disk at constant speed by the CAV control is pointless without the additional compensating signal "c" used for correcting the RF signal read at that data location. This means, that data must be read from the disk, and that, of course, means that the read head must be located at a data address while the disk is running at operational speed for such reading to occur without error.

Accordingly, while Okano '142 discloses CAV control of disk speed, as alleged by the Office Action, nowhere in Okano '142 is there any disclosure or suggestion of CAV-controlling disk speed "during a start-up period from start of spin-up processing" of such a disk-shaped recording medium to a read standby state, as recited in applicants' claim 1. Instead, Okano '142 discloses traversal of the read head to a data address and then correcting

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the RF signal read from that address while simultaneously applying CAV control to achieve constant disk speed, i.e., the disk necessarily is already up to speed. Okano '142 does not disclose or suggest that the read head reads data from an address "during a start-up period from start of spin-up processing" of such a disk-shaped recording medium to a read standby state, nor would a person skilled in the art understand that a data address is read during such run-up period.

For the foregoing reasons, Okano '142 fails to disclose all elements of applicant's claimed invention, and therefore is not a proper basis for rejection under §102. Nor is there any teaching, suggestion, reason, motivation or incentive that would have led one of ordinary skill in the art to applicants' claimed invention. And, there is no disclosure or teaching in Okano '142 that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. Claim 2, which depends from claim 1, is allowable for the same reasons described herein for claim 1, and claim 4, which depends from claim 3, is allowable for the same reasons described herein for claim 3.

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Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.


All claims 1-4 are now proper in form and patentably distinguished over all grounds of rejection cited in the Office Action. Accordingly, allowance of all claims 1-4 is respectfully requested.

Should the Examiner deem that any further action by the applicant would be desirable to place this application in even better condition for issue, the Examiner is requested to telephone applicant's undersigned representatives.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

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Date



Roger W. Parkhurst
Registration No. 25,177
Robert N. Wieland
Registration No. 40,225

RWP:RNW/mhs

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PARKHURST & WENDEL, L.L.P.
1421 Prince Street, Suite 210
Alexandria, Virginia 22314-2805
Telephone: (703) 739-0220